?? Water Abundance Torus (WAT)

Goal: permanent, non-enclosable water security run as a commons — not a utility to be captured.

0) Covenant (the containment field)

No crowns. No chains. Water is a commons, not a commodity.

Copyleft for life: every design, bill of materials, control script and playbook

licensed CC BY-NC-SA / GPL (no enclosure).

Consent governance: users can enter/leave; decisions by Covenant of Equals (no shareholder override).

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1) Input — What the community brings (not money)

Local knowledge & maps: traditional sources, flood paths, dry wells, roof areas.

Labor & craft: install crews, caretakers, sensor stewards, youth “water rangers.”

Sites & roofs: schools, temples, clinics, markets become catchment assets.

Time & trust: timebank hours (ledgered) convert to “water credits” & maintenance priority.

Data & observation: phone photos, well-depth logs, leak reports into an open

ledger.

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2) Circulation — Open tech + protocols (the OSIIN core)

Modular tech stack (choose per climate; all open-source):

Catch & store: roof-rain + first-flush; ferro-cement tanks; underground cisterns; fog nets in coastal hills; sand dams in ephemeral streams.

Lift & move: solar-PV pumps, gravity loops, pedal pumps; standard 24/48V DC bus so parts are interchangeable.

Make & clean:

Biosand/ceramic for pathogens (v1).

UV-C / SODIS for low-power disinfection.

Membrane distillation with waste-heat/solar for brackish water (v2).

Constructed wetlands & bio-reactors for greywater → irrigation.

Point-of-use filters as redundancy.

Recharge: percolation pits, infiltration trenches, check-dams to push water back into the aquifer.

Sensing & telemetry: cheap open hardware (ESP32/LoRa) on tanks, flow meters, well

heads; publishes to OSIIN data hub.

Control & playbooks: open PLC/firmware + maintenance SOPs with photos/emoji (“schoolhouse manuals”).

Social protocols (the Resonance layer):

Commons Guilds: Pump Guild, Tank Guild, Wetland Guild — rotating, trained, paid in timebank credits + small stipends when available.

Mutual credit: time → water credits; credits also redeemable for repair priority or seedlings.

Open ledger: transparent dashboard shows inflows, outflows, leaks, downtime — no black boxes.

Anti-capture deed: community water deed filed locally: infrastructure cannot be sold or pledged as collateral; if dissolved, assets revert to public trust.

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3) Output — What returns to people (and why it sticks)

Liters/person/day at WHO sufficiency (≥50 L pppd) with <$0.01/L operating cost.

Time back: hours/day saved (esp. women/children) from hauling water → converted to learning, care, micro-enterprise.

Health uplift: drop in diarrheal disease,

school attendance up, clinic visits for waterborne disease down.

Green halo: neighborhood canopy increase, kitchen-garden yields, heat-island reduction.

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4) Feedback — The regenerative loop (why it self-sustains)

Live dashboards

(schoolhouse simple): tank % full, well depth, leaks flagged, next service due. Kids read it in morning assembly.

Incentives: leak bounties, “zero-downtime month” celebrations, timebank bonuses for

preventive care.

Adaptive design: sensor data → tweak catchment, pump duty cycles, filter replacement; OSIIN updates propagate like app releases.

Replication packs: every successful node auto-generates a “clone kit” (BOM, cut lists, SOPs, costs, pitfalls) so neighbors can fork it.

 Pilot to Field: 6-step rollout

1. Hearth audit (2 weeks): roof survey, source mapping, community workshop; pick 1 school + 1 clinic as anchors.

2. Seed build (6–8 weeks): rain + storage + biosand + PV pump; install LoRa sensors; train the Pump Guild.

3. Governance kick-off: adopt the Commons Creed; open the timebank; set leak bounty & maintenance rota.

4. Greywater & gardens: wetlands at school/clinic, kitchen gardens; publish

tutorial videos by local teens.

5. Health & time baseline: simple metrics before/after; public wall poster of gains (no NGO PDF buried somewhere).

6. Fork & scale: help a second neighborhood clone the kit; swap crews (cross-training); iterate licenses/handbooks.

 Metrics that matter (resonance indicators)

Access: L/person/day; % households > 50 L pppd; days of storage at 80%

reliability.

Reliability: downtime hours/month per node; mean time to repair.

Equity: queue time variance; grievance

resolution time; % households contributing to guilds.

Health & life: diarrheal incidence, school days missed, hours/day saved from hauling water.

Ecology: well depth trend, soil moisture, canopy index, wetland bio-scores.

Governance: number of trained guild members, rotations completed, audit trail completeness.

 Why this beats scarcity

Anti-enclosure by design: copyleft + deed +

transparency = privatization can’t take root.

Local first: parts you can fix with a wrench and a phone; standard DC bus, interchangeable modules.

Human-centered ops: timebank + guilds turns “maintenance” into prestige + livelihood, not drudgery.

Replication baked in: every node teaches the next; OSIIN propagates improvements like open-source software.